

TRANSPORTATION AND WAREHOUSING



Maryland Department of Labor, Licensing and Regulation
Division of Workforce Development
Office of Workforce Information and Performance
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Transportation and Warehousing Cluster

What is included in the Transportation and Warehousing Cluster?

The Transportation and Warehousing Cluster merges industries that provide passenger and cargo transport, warehousing and storage for goods and support activities related to various modes of transportation. Within this report, cluster activities are stratified according to the following subcategories:

Air Transportation establishments provide air transportation for passenger and/or cargo using either airplanes or helicopters. Also included are establishments providing support services to air carriers:

NAICS

- **4811** Scheduled air transportation
- **4812** Nonscheduled air transportation
- **4881** Support activities for air transportation such as airport operation, air traffic control and baggage/cargo handling

Water Transportation establishments provide water transportation of passengers and/or cargo via ships, barges and boats. Also included are establishments providing water-related support services:

NAICS

- **4831** Sea/coastal/great lakes transportation
- **4832** Inland water transportation
- **4883** Support activities for water such as port/harbor operation, shipping navigational services and cargo handling

Trucking establishments provide over-the-road transportation of cargo primarily using trucks and tractor-trailers. Goods transportation can be either local or long-distance. Included are:

NAICS

- **4841** General freight trucking
- **4842** Specialized freight trucking

Transit and Ground Passenger Transportation establishments provide a variety of passenger transportation services. Activities are distinguished primarily by factors such as vehicle types, routes and schedules. Included are:

NAICS

- **4851** Urban transit systems
- **4852** Interurban/rural bus transportation
- **4853** Taxi & limo service
- **4854** School & employee bus transportation
- **4855** Charter bus industry
- **4889** Other ground passenger transportation

Other Support Activities for Transportation establishments provide services either to transportation carrier establishments or directly to the public. Industries are classified according to the mode of transportation served. Included are:

- **4884** Support activities for road transportation such as emergency road services, towing and weighing stations

- **4885** Freight transportation arrangement such as freight forwarders, marine shipping agents and customs brokers
- **4889** Other support activities for transportation such as packing/crating and van/carpool arrangement

Rail/Natural Gas Pipeline Transportation and Support Activities, a combined group, includes the following:

- **4821** Rail transportation
- **4862** Pipeline transportation of natural gas
- **4869** Other pipeline transportation such as refined petroleum products
- **4882** Support activities for rail transportation such as rail car service/repair, cargo handling and terminal operation

Warehousing and Storage establishments operate merchandise warehousing and storage facilities, generally handling goods in containers such as boxes, barrels/drums and using equipment such as forklifts, pallets and racks.

- **4931** Warehousing and storage facilities for refrigerated, farm, lumber and bulk petroleum products

For additional descriptive information on NAICS, go to www.census.gov/epcd/naics02/

This publication was developed using data from the Quarterly Census of Employment and Wages (ES 202) and from the Occupational Employment Statistics (OES) Programs.

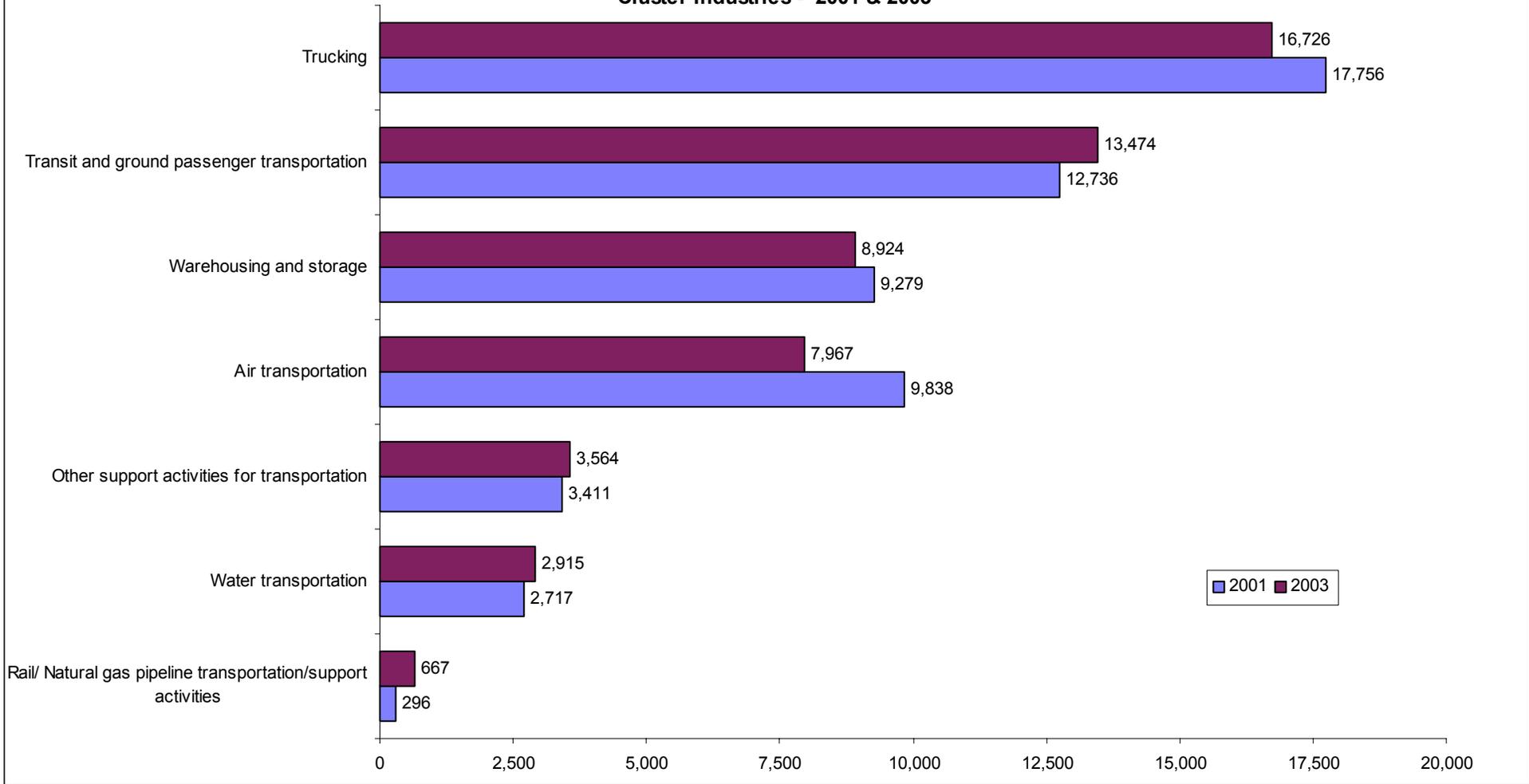
Maryland
Employment and Wages in the Transportation and Warehousing Cluster Industries

NAICS	Industry Description	Employment		Payroll		Average Weekly Wage 2003
		2001	2003	2001	2003	
	Transportation and Warehousing	57,113	54,982	\$2,125,981,748	\$2,123,389,524	\$743
	Air Transportation	9,838	7,967	457,142,937	366,065,355	884
4811	Scheduled air transportation	6,552	4,398	328,328,167	209,404,787	916
4812	Nonscheduled air transportation	225	255	5,791,393	8,145,512	614
4881	Support activities for air transportation	3,061	3,314	123,023,377	148,515,056	862
	Water Transportation	2,717	2,915	129,873,358	145,483,217	960
4831	Sea/coastal/great lakes transportation	695	540	37,132,744	35,193,853	1,253
4832	Inland water transportation	32	34	1,402,466	1,585,353	897
4883	Support activities for water	1,990	2,341	91,338,148	108,704,011	893
	Trucking	17,756	16,726	590,795,087	587,354,440	675
4841	General freight trucking	12,359	11,465	432,964,483	425,101,215	713
4842	Specialized freight trucking	5,397	5,261	157,830,604	162,253,225	593
	Transit and Ground Passenger Transportation	12,736	13,474	386,714,806	434,907,675	621
4851	Urban transit systems	5,202	5,455	242,009,526	272,590,927	961
4852	Interurban/rural bus transportation	95	171	1,675,285	2,771,946	312
4853	Taxi & limo service	1,592	1,881	32,432,517	45,217,059	462
4854	School & employee bus transportation	3,410	3,625	55,862,020	58,197,837	309
4855	Charter bus industry	1,281	1,134	26,364,152	25,033,185	425
4859	Other ground passenger transportation	1,156	1,208	28,371,306	31,096,721	495
	Other Support Activities for Transportation	3,411	3,564	123,911,790	136,397,889	736
4884	Support activities for road transportation	1,161	1,453	31,057,748	43,467,690	575
4885	Freight transportation arrangement	1,795	1,752	74,297,859	75,981,806	834
4889	Other support activities for transportation	455	359	18,556,183	16,948,393	908
4821/82 4862/69	Rail/Natural gas pipeline transportation & support activities	296	667	20,352,250	59,676,268	1,721
4931	Warehousing and storage	9,279	8,924	377,708,721	360,324,472	776
N/A	Nondistributable*	1,080	745	39,482,799	33,180,208	856

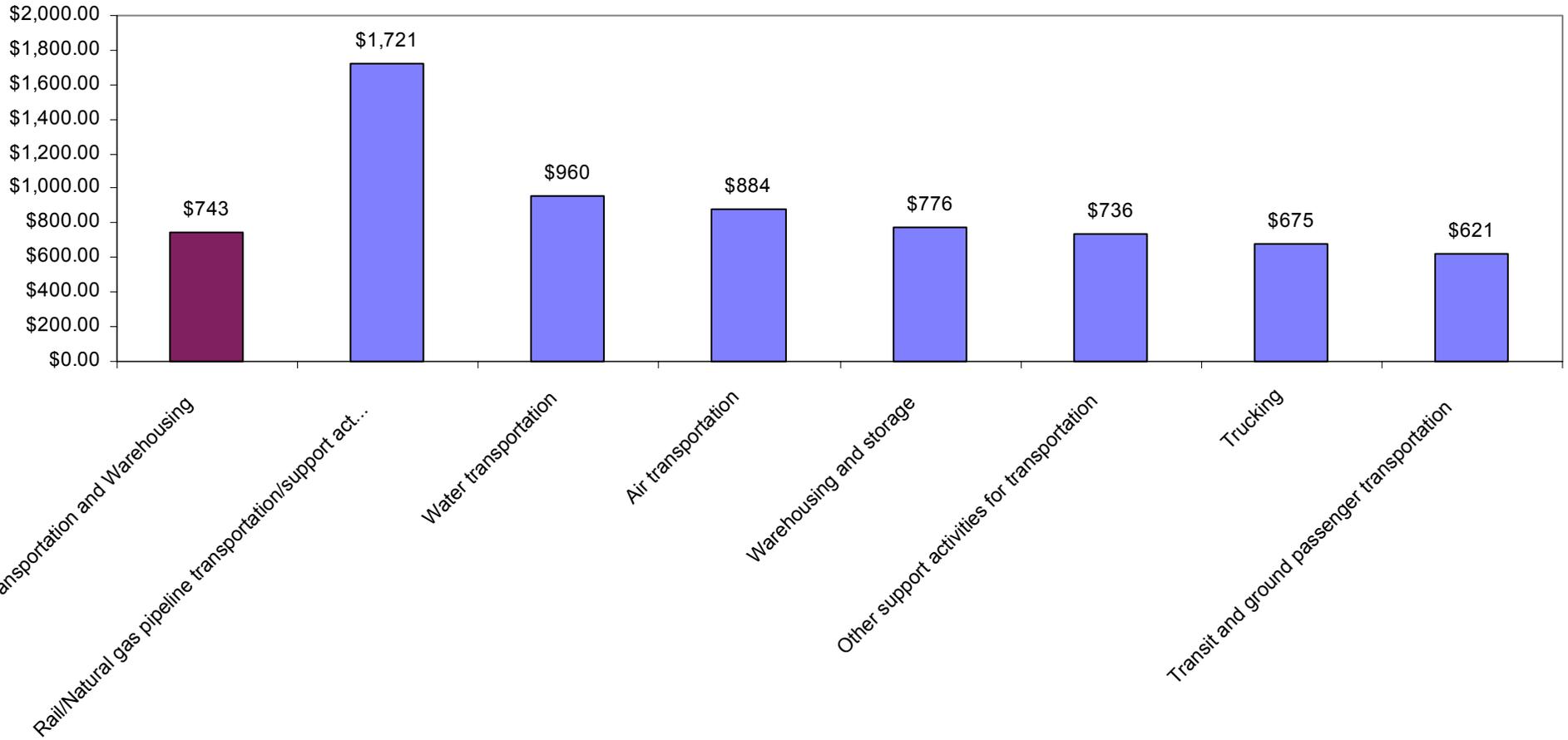
- A number of factors have negatively impacted upon the performance of the "consumer sensitive" industries within the Transportation and Warehousing Cluster over the past few years. The events of 9/11 and the ensuing economic slowdown diminished demand in a number of industries within the cluster, industries already beleaguered by increasing competition and escalating operating costs.
- For the cluster as a whole, employment declined by about 3.7% through 2003. Performance among the individual cluster components was, however, mixed, with gains primarily in water transportation, ground passenger transportation and other transportation support activities helping to mitigate the impact of declines elsewhere in the cluster.
- The aftershock from 9/11, coupled with increased competition, sorely affected the air transportation component. Downsizing by a major air carrier was, in large part, responsible for the overall employment decline in this component industry, a reduction which diminished the presence of this industry not only in Maryland but in Anne Arundel County as well.

* Includes establishments in all Transportation and Warehousing Cluster NAICS industries that cannot be distributed geographically.

Maryland
Employment in the Transportation and Warehousing
Cluster Industries - 2001 & 2003

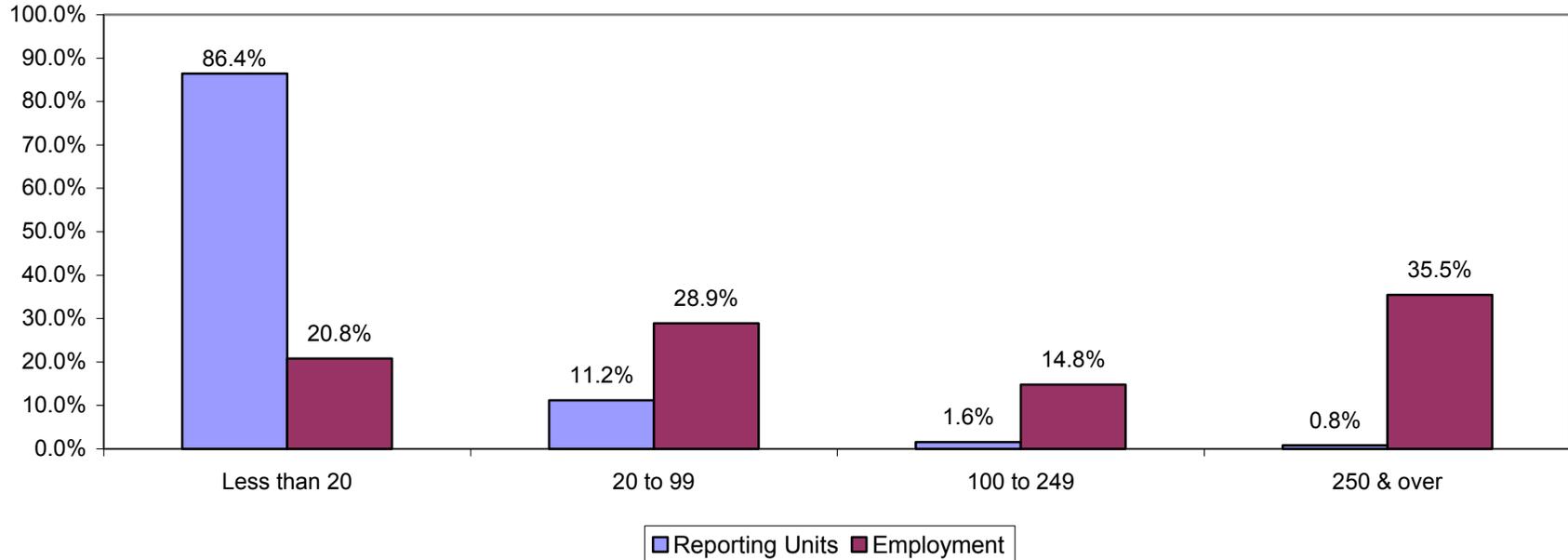


Maryland
Average Weekly Wage in Transportation and Warehousing
Cluster Industries - 2003



Maryland
Reporting Units and Employment Concentration in the Transportation and Warehousing Cluster by
Size Class*

Based on 4th Quarter 2003 Average Employment



	Reporting Units				Employment			
	Less than 20	20 to 99	100 to 249	250 & over	Less than 20	20 to 99	100 to 249	250 & over
Transportation & Warehousing Cluster	2,961	382	56	26	11,517	16,031	8,232	19,665
Percent of Total	86.4%	11.2%	1.6%	0.8%	20.8%	28.9%	14.8%	35.5%

- Close to 9 out of every 10 business establishments in the Transportation and Warehousing cluster are manned by less than twenty workers. Among the detailed industries in the cluster, the highest density of small businesses are found in general freight trucking. Nearly 87% of all businesses in this industry fall within this size class -- a size class where about a quarter of the industry's total jobs are centered.
- While less than 1% of all businesses in the cluster are classified as large employers, employment in the 250+ size class accounts for about 1 out of every 3 jobs in the cluster. Businesses providing support activities for air transportation comprise about 20% of all employers in this size class.

* Includes establishments in all Transportation and Warehousing Cluster NAICS industries that cannot be distributed geographically.

Maryland
Occupations Typically Associated with the Transportation and Warehousing Cluster

Occupation	Annual Openings			Training Code	Median Hrly/Annual Wage
	Growth *	Replacements *	Total *		
Airline Pilots, Copilots and Flight Engineers	15	30	45	5	NA
Commercial Pilots	0	5	5	7	\$56,300
Avionics Technicians	0	5	5	7	24.00
Bus and Truck Mechanic and Diesel Engine Specialists	60	75	135	7	17.25
Aircraft Mechanic/Service Technician	30	30	60	7	22.50
Electrical/Electronic Installers/Repairers, Transp. Equip.	0	10	10	7	15.75
Supv., Transp., Material-Moving Machine & Veh. Oprs.	40	75	115	8	21.75
Aircraft Cargo Handling Supervisors	5	5	10	8	18.50
Captain, Mates & Pilots, Water Vessels	10	15	25	8	18.25
Transportation and Storage Distribution Managers	45	40	85	8	29.00
Transportation Inspectors	10	15	25	8	15.75
Railroad Conductors and Yardmasters	0	10	10	8	NA
Railroad Brake, Signal and Switch Operators	0	0	0	8	NA
Supervisors, Mechanics, Installers and Repairers	140	205	345	8	23.50
Air Traffic Controllers	0	0	0	9	43.50
Flight Attendants	20	15	35	9	NA
Cargo and Freight Agents	0	15	15	10	16.00
Bus Drivers, School	200	175	375	10	12.50
Bus Drivers, Transit and Intercity	55	45	100	10	12.25
Truck Drivers, Heavy and Tractor-Trailer	325	390	715	10	17.00
Dispatchers	30	60	90	10	15.75
Customer Service Representatives	735	485	1,220	10	14.00
Taxi Drivers and Chauffeurs	115	35	150	11	10.50
Industrial Truck Operators	120	175	295	11	13.75
Shipping, Receiving and Traffic Clerks	15	210	225	11	12.75
Production, Planning and Expediting Clerks	65	105	170	11	18.25
Laborers & Freight, Stock & Material Movers, Hand	175	1,280	1,455	11	10.50
Truck Drivers, Light or Delivery	480	190	670	11	13.25
Reservation and Transportation Ticket Agents	40	40	80	11	12.00
Baggage Porters and Bellhops	20	30	50	11	7.25

Note: Occupations are ranked by training code

NA Information Not Available

Estimates for Annual Openings, representing economy-wide demand for 2002-2012, are rounded to the nearest 5

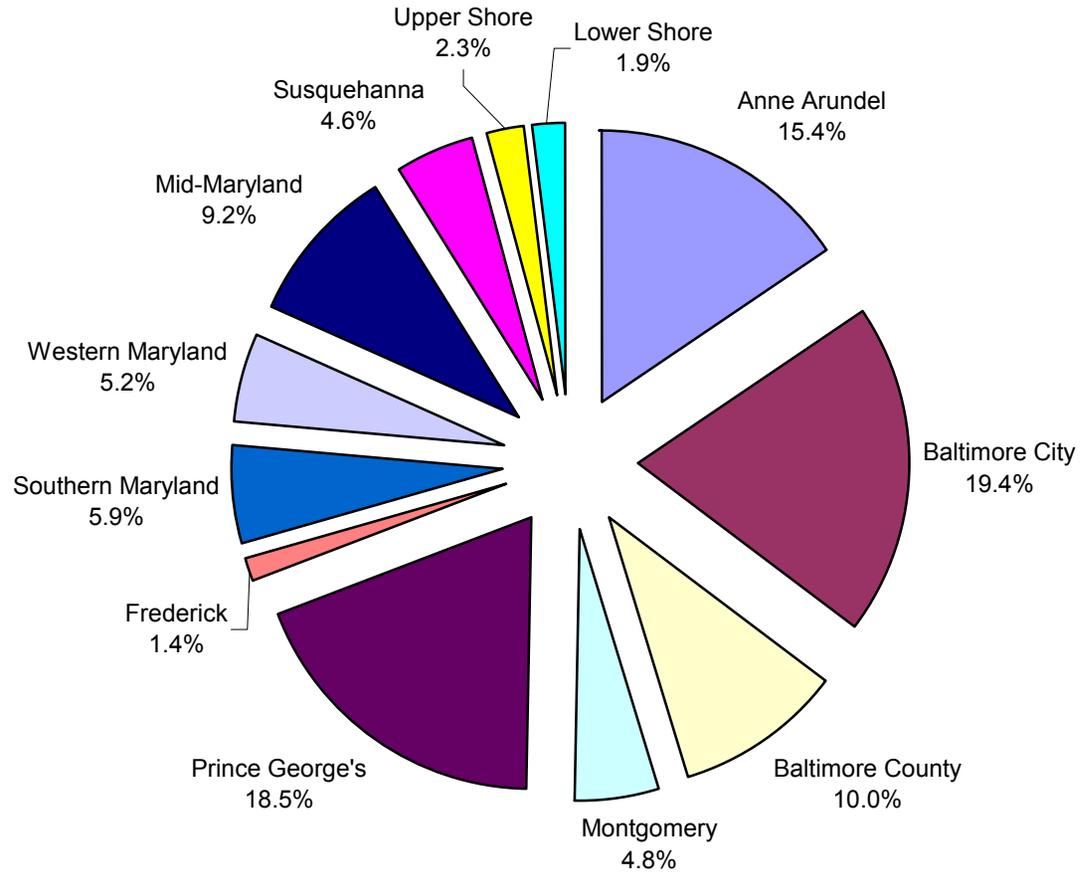
Wages adjusted to reflect inflationary pressures through September 2004.

Education and Training Categories

Occupations are classified into 1 of 11 categories by the Bureau of Labor Statistics based on analyses of the occupation's usual education and training requirements conducted while developing information to present in the *Occupational Outlook Handbook*. The 11 classifications are as follows:

- 1** *First professional degree.* Completion of the academic program usually requires at least 6 years of full-time equivalent academic study, including college study prior to entering the professional degree program.
- 2** *Doctoral degree.* Completion of the degree program usually requires at least 3 years of full-time equivalent academic work beyond the bachelor's degree.
- 3** *Master's degree.* Completion of the degree program usually requires 1 or 2 years of full-time equivalent study beyond the bachelor's degree.
- 4** *Bachelor's or higher degree, plus work experience.* Most occupations in this category are managerial occupations that require experience in a related nonmanagerial position.
- 5** *Bachelor's degree.* Completion of the degree program generally requires at least 4 years but not more than 5 years of full-time equivalent academic work.
- 6** *Associate degree.* Completion of the degree program usually requires at least 2 years of full-time equivalent academic study.
- 7** *Postsecondary vocational award.* Some programs last only a few weeks while others may last more than a year. In some occupations, a license is needed that requires passing an examination after completion of the training.
- 8** *Work experience in a related occupation.* Some occupations requiring work experience are supervisory or managerial occupations.
- 9** *Long-term on-the-job training.* This category includes occupations that generally require more than 12 months of on-the-job training or combined work experience and formal classroom instruction for workers to develop the skills needed for average job performance. This category includes formal and informal apprenticeships that may last up to 4 years and short-term intensive employer-sponsored training that workers must successfully complete. Individuals undergoing training are generally considered to be employed in the occupation. This category includes occupations in which workers may gain experience in non-work activities, such as professional athletes who gain experience through participation in athletic programs in academic institutions.
- 10** *Moderate-term on-the-job training.* This category includes occupations in which workers can develop the skills needed for average job performance after 1 to 12 months of combined on-the-job experience and informal training.
- 11** *Short-term on-the-job training.* This category covers occupations in which workers can develop the skills needed for average job performance after a short demonstration or up to one month of on-the-job experience or instruction.

Transportation & Warehousing Cluster - 2003

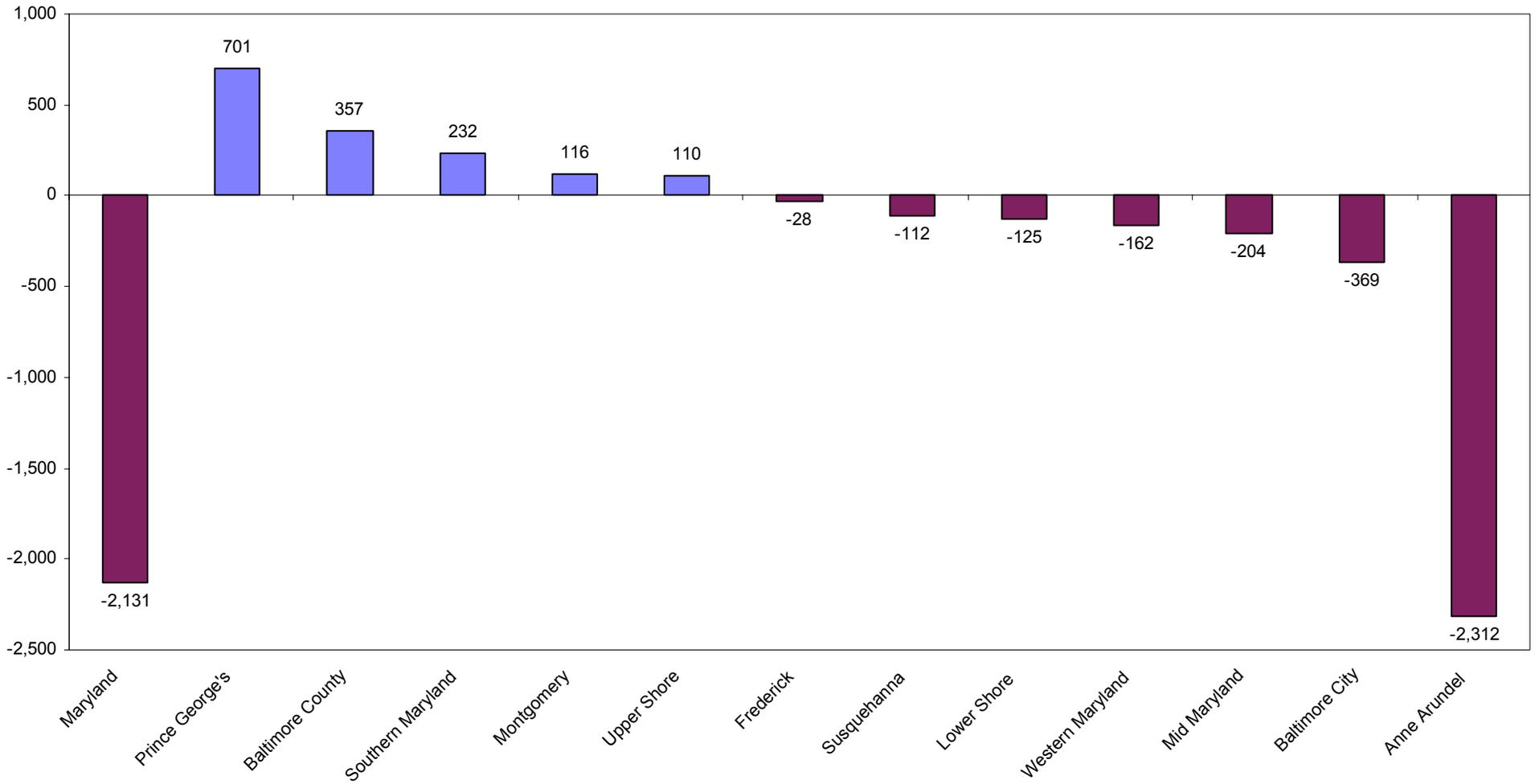


**Employment and Wages in the Transportation and Warehousing Cluster
By WIA and Select Local Jurisdictions**

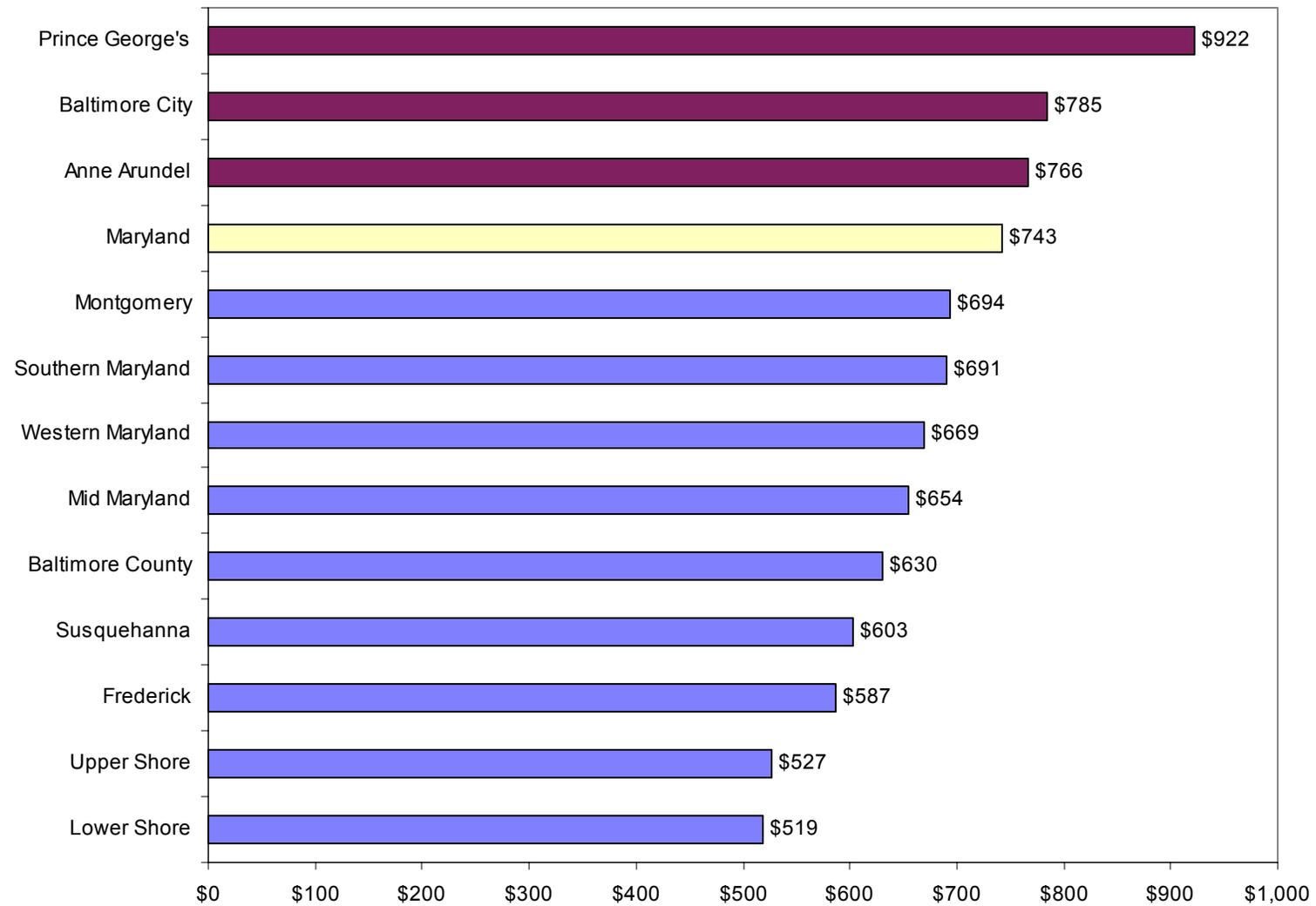
WIA	Employment		Employment Change 2001 - 2003	Number of Reporting Units 2003	Total Wages 2003	Average Weekly Wage 2003
	2001	2003				
Anne Arundel	10,791	8,479	-2,312	385	\$337,562,478	\$766
Baltimore City	11,048	10,679	-369	365	436,120,455	785
Baltimore County	5,115	5,472	357	413	179,132,268	630
Frederick	788	760	-28	85	23,210,932	587
Montgomery	2,531	2,647	116	242	95,561,759	694
Prince George's	9,477	10,178	701	293	487,831,914	922
Lower Shore	1,183	1,058	-125	145	28,563,071	519
Somerset	84	68	-16	20	2,258,677	639
Wicomico	994	856	-138	86	23,749,017	534
Worcester	105	134	29	39	2,555,377	367
Mid Maryland	5,246	5,042	-204	328	171,574,149	654
Carroll	1,012	1,055	43	165	27,417,821	500
Howard	4,234	3,987	-247	163	144,156,328	695
Southern Maryland	3,007	3,239	232	257	116,311,086	691
Calvert	432	557	125	60	17,348,979	599
Charles	751	798	47	68	18,767,652	452
St Mary's	1,824	1,884	60	129	80,194,455	819
Susquehanna	2,664	2,552	-112	286	79,969,588	603
Cecil	638	586	-52	95	19,258,325	632
Harford	2,026	1,966	-60	191	60,711,263	594
Upper Shore	1,158	1,268	110	201	34,754,744	527
Caroline	354	410	56	45	12,267,543	575
Dorchester	452	407	-45	46	10,141,472	479
Kent	84	56	-28	26	1,252,949	430
Queen Anne's	126	246	120	57	7,158,305	560
Talbot	142	149	7	27	3,934,475	508
Western Maryland	3,025	2,863	-162	246	99,616,872	669
Allegany	456	518	62	67	15,547,901	577
Garrett	364	334	-30	54	8,813,144	507
Washington	2,205	2,011	-194	125	75,255,827	720
Nondistributable*	1,080	745	-335	193	33,180,208	856
Maryland	57,113	54,982	-2,131	3,439	2,123,389,524	743

* Includes establishments in all Transportation and Warehousing Cluster NAICS industries that cannot be distributed geographically

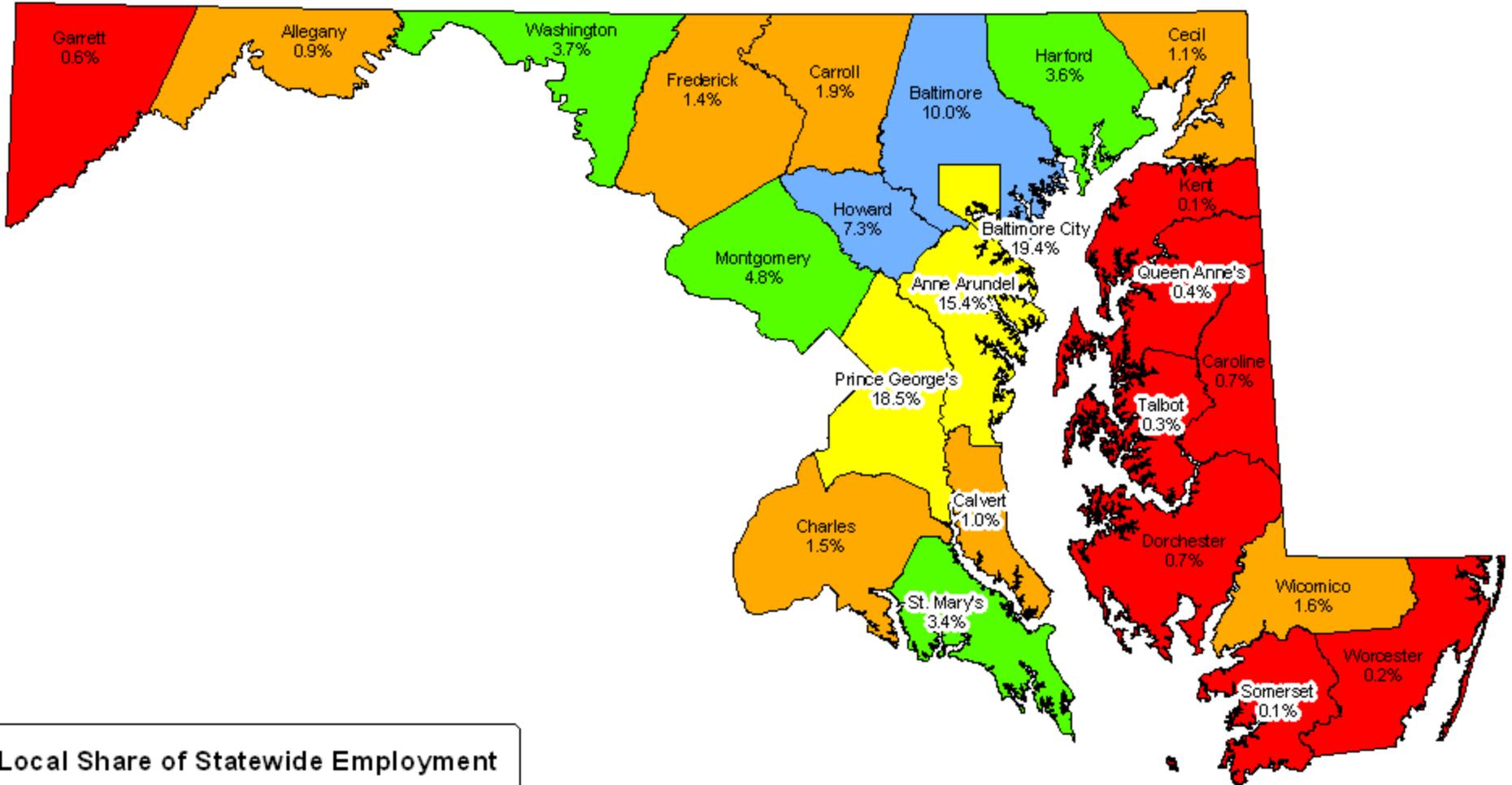
Employment Changes in the Transportation and Warehousing Cluster by WIA 2001 - 2003



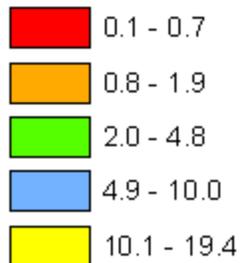
Average Weekly Wage in the Transportation and Warehousing Cluster by WIA - 2003



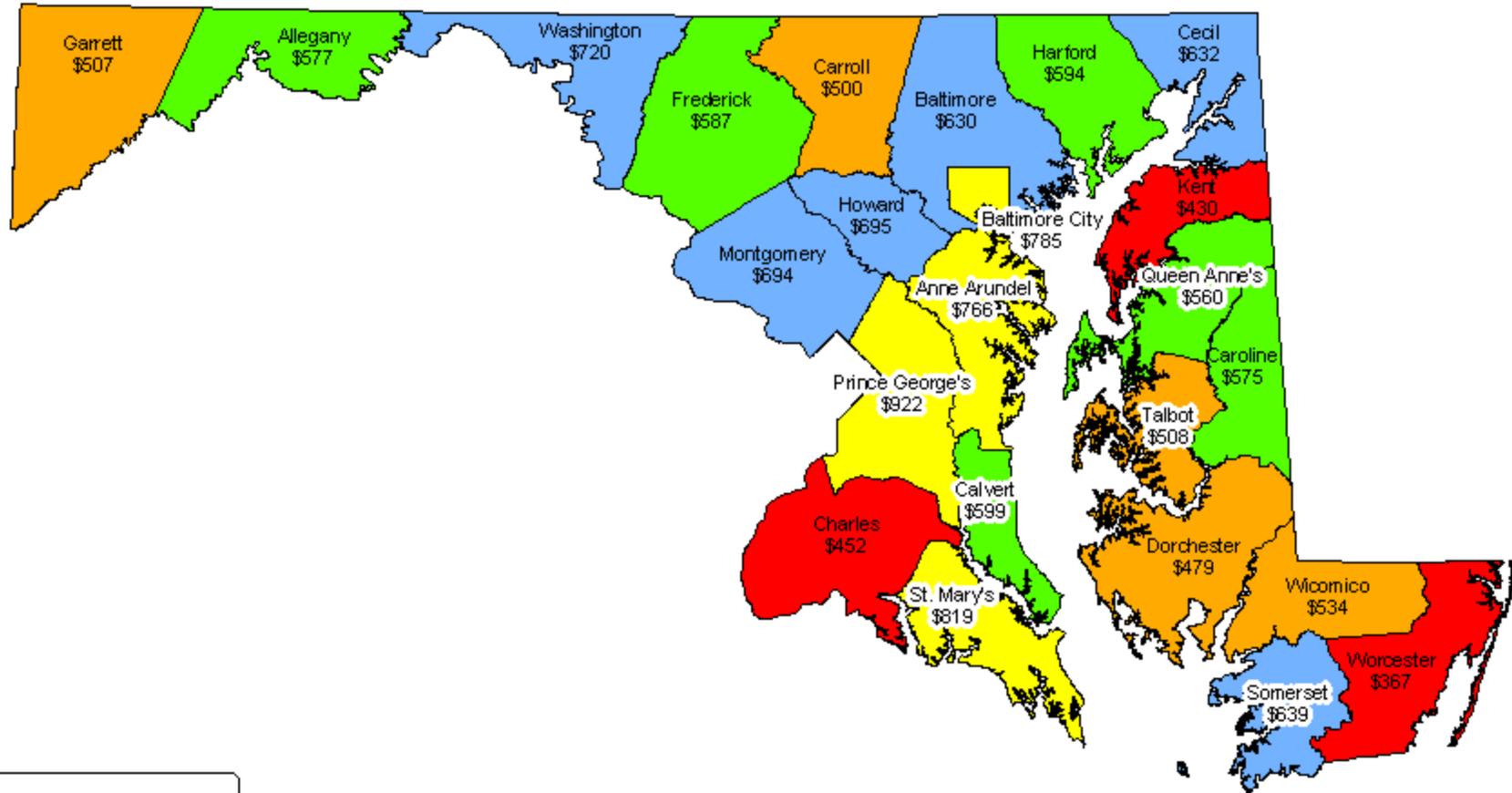
Local Share of Statewide Employment in the Transportation & Warehousing Cluster 2003



Local Share of Statewide Employment



Average Weekly Wage in the Transportation & Warehousing Cluster by Local Jurisdictions 2003



Average Weekly Wage

